

NIPER MODEL PAPER - 2

1. Select the correct statement about lipids

- (a) They form essential structural components of cells
- (b) Provide roughly twice the energy as carbohydrates
- (c) Help to maintain body temperature and cushion organs against shocks
- (d) All of these

2. If a pair of electrons is unequally shared between two atoms.... occurs

- (a) Non polar covalent bond
- (b) Ionic bond
- (c) Coordinate bond.
- (d) Polar covalent bond

3. Which of the following is a protozoan infection that can lead to lesions in the eye if it is acquired congenitally (in utero)

- (a) Malaria
- (b) Giardiasis
- (c) Cryptosporidiosis
- (d) Toxoplasmosis

4. Papaverine possesses.....methoxy groups

- (a) 2
- (b) 3
- (c) 4
- (d) 6

5. The drug which inhibits the angiotensin-converting enzyme

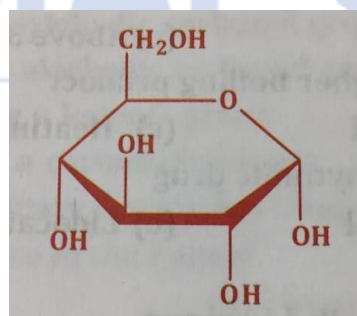
- (a) Captopril
- (b) Enalapril

- (c) Ramipril
- (d) All of these

6. Dumping is

- (a) Selling of goods to abroad at a price well below the production cost or from the home market price
- (b) The process by which the supply of a manufacture's product remains low in the domestic market, which batches him better price
- (c) Prohibited by regulations of GATT
- (d) All of these

7. Following structure of a-D-glucose represents



- (a) Fisher projection
- (b) Saw-horse projection
- (c) Haworth projection
- (d) Newman projection

8. Intermediates formed during the biosynthesis of cholesterol is/are

- (a) Mevalonic acid and isopentenyl pyrophosphate
- (b) Mevalonic acid and aldosterone
- (c) Isoprenaline and aldosterone
- (d) Isoprenaline and isopentenyl phosphate

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9. Cresol with soap solution is a preparation, in which soap is incorporated to

- (a) Impart detergent property
- (b) Improve mutual miscibility of cresol and water by reducing critical solution temperature of cresol water system
- (c) Sustain the germicidal action of cresol
- (d) Improve the stability of cresol

10. Number of double bonds in molecule is estimated by

- (a) IR
- (b) NMR
- (c) ESR
- (d) UV

11. Mode of action of leflunomide

- (a) Inhibits calcineurin
- (b) Inhibit purine synthesis
- (c) Inhibit cytokine gene expression
- (d) Inhibit pyrimidine synthesis

12. Which of the following vitamin secreted in the urine

- (a) Vitamin A
- (b) Vitamin D
- (c) Vitamin E
- (d) Vitamin B

13. An optically active compound that rotates plane polarized light in a counterclockwise direction called

- (a) Diastereomer
- (b) Mesomer

- (c) Dextrorotatory
- (d) Levorotatory

14. Which of the following is an alkane which can exhibit optical activity

- (a) Neopentane
- (b) Isopentane
- (c) 3-Methylpentane
- (d) 3-Methylhexane

15. $\text{H}_2\text{C}-\text{CH}_2-\text{Br}$ will show NMR signals

- (a) 2
- (b) 3
- (c) 5
- (d) None of these

16. Number of stereoisomers of glucose is

- (a) 4
- (b) 8
- (c) 16
- (d) None of these

17. Cori's cycle transfers

- (a) Glucose from muscles to liver
- (b) Lactate from muscles to liver
- (c) Lactate from liver to muscles
- (d) Pyruvate from liver to muscles

18. Demographic divide refers to a rise in population

- (a) Between the age group of 1 to 14 years
- (b) Between the age group of 15 to 64 years

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- (c) Between the age group of 65 to 74 years
(d) Above 74 years

19. Alpha anomers are isomers of the form

- (a) Cis
(b) Trans
(c) Both (a) and (b)
(d) None of these

20. The major site of urea synthesis is

- (a) Brain
(b) Kidneys
(c) Liver
(d) Muscles

21. How many phenylhydrazine consume during the formation of Glucosazone

- (a) One Molecule
(b) Two molecules
(c) Three molecules
(d) It does not depends on number of phenylhydrazine

22. Sulphur-containing amino acid is

- (a) Tyrosine
(b) Chondroitin sulphate
(c) Homocysteine
(d) Tryptophan

23. Most electronegative atom

- (a) Nitrogen
(b) Chlorine

- (c) Oxygen
(d) Bromine

24. Rajesh took loan of 12,000 rupees. After 5 years he paid 3600 rupees as interest. What is the rate of interest per annum

- (a) 6%
(b) 3%
(c) 8%
(d) 9.5 %

26. Sulfasalazine is combination of

- (a) Sulphapyridine & aminosaliclate
(b) Trimethoprim & sulfamethoxazole
(c) Sulphapyridine & sulfamethoxazole
(d) Sulfamethoxazole & aminosaliclate

27. How many ATP are formed from one molecule of glucose during glycolysis in absence of oxygen

- (a) 2ATP
(b) 3ATP
(c) 6ATP
(d) 8ATP

28. Impurity detection method is

- (a) GC-MS
(b) Optical densitometer
(c) Mass Spectroscopy
(d) None of these

29. Water solubility of the drug is due to

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- (a)-SH group
- (b) Lipophilic group
- (c)-OH group**
- (d) All of these

30. The drug which shows dose dependent pharmacokinetics follows

- (a) Linear Pharmacokinetics
- (b) Non-linear pharmacokinetics**
- (c) Both (a) and (b)
- (d) Non compartmental pharmacokinetics

31. URL means

- (a) Universal research list resource locator
- (b) Universal
- (c) Universal resource list**
- (d) Uniform resource locator

32. Dipteryx Odorata is biological source of

- (a) Buck wheat
- (b) Tonka bean**
- (c) Ginkgo biloba
- (d) Silymarin

33. In TCA cycle which of the following combines with OAA (oxaloacetic acid) to complete the reaction

- (a) Acetyl CoA**
- (b) Succinyl CoA
- (c) Malonyl CoA
- (d) All of these

34. Pyrogens are

- (a) Derivatives of pyrogallol
- (b) Used as preservatives in parenteral solutions
- (c) Products of the growth of microorganisms**
- (d) Released by the immune system in response to bacterial infection

35. Which of the following antianginal agents is a calcium channel blocker

- (a) Nitroglycerin
- (b) Dipyridamole
- (c) Minoxidil
- (d) Nifedipine**

36. Which is the characteristic reaction of Benzene

- (a) Nucleophilic substitution
- (b) Electrophilic substitution**
- (c) Addition
- (d) None of these

37. In clinical trial study, 100-1000 individuals are used in which phase

- (a) Phase 3**
- (b) Phase 2
- (c) Phase 1
- (d) Phase 4

38. If our eyes travel in counter clockwise direction from the ligand of highest priority to the ligand of lowest priority, the configuration is

- (a) R-Configuration
- (b) S-Configuration**
- (c) E-Configuration

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(d) C-Configuration

39. Nuclear magnetic moment is not shown by

- (a) ^{13}C
- (b) ^1H
- (c) ^{16}O
- (d) ^{15}N

40. LOD means

- (a) Line of detection
- (b) line on detection
- (c) Limit on detection
- (d) Limits of detection

41. One of the following determine the rate of reaction

- (a) All
- (b) E
- (c) Both (a) and (b)
- (d) AP

42. All persons licensed to manufacture of drugs are required to keep samples from the date of expiry under Drugs & Cosmetics Act from ebatch for

- (a) 3 years
- (b) 3 month
- (c) 5 years
- (d) 10 years

43. Bacteriostatic effect is

- (a) Inhibition of bacterial cell division

(b) Inhibition of young bacterial cells growth

- (c) Destroying of bacterial cells
- (d) Formation of bacterial L-form

44. Which is not a brand of Dabur

- (a) Amla oil
- (b) Odomos
- (c) Nihar
- (d) Meswak

45. Software Gaussian is used for

- (a) For sequence alignment of proteins
- (b) For statistical calculations
- (c) For quantum chemistry calculations
- (d) None of these

46. Racemization is related to

- (a) E1
- (b) E2
- (c) S_N1
- (d) S_N2

47. Two monosaccharides differs from each other in their configuration around a single carbon other than anomeric carbon is called

- (a) Anomers
- (b) Epimers
- (c) Enantiomers
- (d) Diastereom

48. Antibiotic inhibiting bacterial RNA synthesis is

- (a) Erythromycin
- (b) Rifampin

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- (c) Chloramphenicol
- (d) Imipenem

49. Common name of H₁₀, is acid

- (a) Orthoperiodic
- (b) Meta periodic acid
- (c) Periodic acid
- (d) All of these

50. Method for converting an aldose into another aldose containing one less carbon is

- (a) Ruff degradation
- (b) Kiliani fischer synthesis
- (c) PAS
- (d) None of these